

IN THE CLAIMS

Please cancel claims 2 and 3 without prejudice.

Please amend claims 1 and 11.

Please add new claims 18-24.

Please enter the pending claims as follows:

1. (Currently Amended) An apparatus comprising:
 - a holder adapted to mount a substrate;
 - a stage adapted to position said holder in a chamber;
 - a pumping system adapted to evacuate said chamber;
 - an imaging system adapted to locate an opaque defect in said substrate,
said imaging system comprising a first electron column;
 - a gas delivery system adapted to dispense a reactant gas towards said defect; and
 - an electron delivery system adapted to direct electrons towards said opaque defect and induce etching by said reactant gas, said electron delivery system comprising a second electron column, ~~said electrons comprising a tail diameter of about 5-125 nm.~~

2-3. (Canceled)

Serial No.: 09/895,511

4. (Original) The apparatus of claim 1 wherein said substrate comprises a transmissive DUV mask.
5. (Original) The apparatus of claim 1 wherein said opaque defect comprises chrome and said reactant gas comprises chlorine and oxygen.
6. (Original) The apparatus of claim 1 wherein said substrate comprises a reflective EUV mask.
7. (Original) The apparatus of claim 1 wherein said opaque defect comprises an absorber and said reactant gas comprises Xenon Fluoride (XeF_2).
8. (Original) The apparatus of claim 1 wherein said opaque defect comprises Carbon and said reactant gas comprises water vapor or oxygen.
9. (Original) The apparatus of claim 1 further comprising a focusing system adapted to highly focus said electrons on said opaque defect.
10. (Original) The apparatus of claim 1 further comprising a scanning system adapted to scan said electrons across said opaque defect.

11. (Currently Amended) The apparatus of claim 1 further comprising an acceleration system adapted to provide a low acceleration voltage for said electrons; ~~said low acceleration voltage comprising a range of 0.3-3.0 keV.~~

12. (Original) The apparatus of claim 1 further comprising a computer adapted to control said electron delivery system.

13-17. (Canceled)

18. (New) The apparatus of claim 1 wherein said gas delivery system is also adapted to dispense a carrier gas towards said opaque defect.

19. (New) The apparatus of claim 1 wherein said gas delivery system dispenses said reactant gas with an angular dispersion of 5-25 degrees.

20. (New) The apparatus of claim 1 wherein said reactant gas adsorbs to said opaque defect and becomes disassociated.

21. (New) The apparatus of claim 1 wherein said chamber comprises a pressure of about 0.500-10.000 milliTorrr (mT) locally over said opaque defect.

22. (New) The apparatus of claim 1 wherein said electrons form a beam comprising a current of about 0.050-1.000 nanoAmperes (nA).

23. (New) The apparatus of claim 1 wherein said electrons form a beam comprising a tail diameter of about 5-125 nm.

24. (New) The apparatus of claim 1 wherein said electrons comprise a range of 0.3-3.0 keV.